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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/785,517	02/24/2004	Toshiaki Murai	1018.1203101	8324
28075	7590	06/22/2005	EXAMINER	
CROMPTON, SEAGER & TUFTE, LLC 1221 NICOLLET AVENUE SUITE 800 MINNEAPOLIS, MN 55403-2420			NWAONICHA, CHUKWUMA O	
			ART UNIT	PAPER NUMBER
			1621	

DATE MAILED: 06/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/785,517	<b>Applicant(s)</b> MURAI ET AL.	
	<b>Examiner</b> Chukwuma O. Nwaonicha	<b>Art Unit</b> 1621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3-10 is/are allowed.
- 6) ☒ Claim(s) 1-2 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

### DETAILED ACTION

Claims 1-10 are pending in the application.

#### **Priority**

Applicants' claim for domestic priority under 35 U.S.C. 119(e) is acknowledged.

#### **Claim Rejections - 35 USC § 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

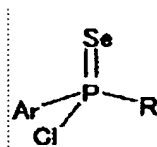
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1 and 2** are rejected under 35 U.S.C. 102(b) as being anticipated by Sekar et al., {Improved synthesis of HN(SPPH<sub>2</sub>)(SePPh<sub>2</sub>) and some coordination chemistry of [N(SPPH<sub>2</sub>)(SePPh<sub>2</sub>)]<sup>+</sup>, Inorganica Chimica Acta, 319 (2001), 117-122}.

Sekar et al. disclose applicants claimed asymmetric phosphinoselenoic chloride {Ph<sub>2</sub>P(Se)Cl}. See page 118, column 1, second paragraph, line 8.

**Claims 1 and 2** are rejected under 35 U.S.C. 102(b) as being anticipated by Krawiecka, {Reaction of thio- and Selenolo Esters of Phosphorus Acids with Hologens Part 5. Halogenolysis of Selenium Methyl Phosphinoselenoates, Heteroatom Chemistry (1992), 3(4), 385-394}.

Krawiecka discloses phosphinoselenoic chloride compound of general formula 1



formula 1

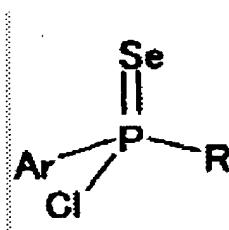
wherein R is t-Bu group. See footnote on page 390, scheme 4, compound 23a.

***Allowed Claims***

Claims 3-10 are allowable over the prior art of record.

***Reason For Allowance***

The following is an examiner's statement of reasons for allowance: applicants' claim a method for producing an asymmetric phosphinoselenoic chloride of general formula 2,



formula 2

the method comprising: mixing arylphosphine dichloride, an organometallic reagent, and selenium in a solvent so as to cause a reaction of the arylphosphine dichloride, the organometallic reagent, and the selenium, wherein all the variables are as defined in the claims was neither found to be obvious nor anticipated by the prior art of record.

The closest prior art is Bayandina et al., {Synthesis of Arylselenophosphinic Acid Derivatives and their Properties, Zhurnal Obshchei Khimi (1978), 48 (12), 2673-2677}. Bayandina et al., discloses method for producing an asymmetric phosphinoselenoic chloride by heating arylphosphine chloride and selenium at 120°C. The two processes differ in that applicants' claim a process that employs arylphosphine dichloride and

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organometallic reagent while Bayandina et al. disclose a process that employs arylphosphine chloride. See abstract.

A further search of the prior art failed to uncover any reference that taught or motivated one of ordinary skill to make and use an asymmetric phosphinoselenoic chloride of general formula 2 as claim by applicants.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chukwuma O. Nwaonicha whose telephone number is 571-272-2908. The examiner can normally be reached on Monday thru Friday, 8:30am to 5:00pm.

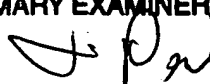
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann R. Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chukwuma O. Nwaonicha, Ph.D.  
Patent Examiner  
Art Unit: 1621

Application/Control Number: 10/785,517  
Art Unit: 1621

J. PARSA  
PRIMARY EXAMINER



*Per*

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Supervisory Patent Examiner,  
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